Preface

When I began teaching, I remember walking around my fourth-grade classroom and thinking, "I can't believe they pay me to do this." I liked everything about it, except grading. I could not make peace with that part of the job. It felt like I was giving with the teaching hand and taking away with the grading hand. Some of what I did then, and later as a secondary school teacher, was unfair to students, partly because I didn't know how to assess accurately and partly because I didn't know how to do anything with assessment but grade.

My introduction to assessment for learning came one summer as a participant in the Puget Sound Writing Project, where I learned to revise my own writing based on thoughtful feedback from colleagues and to reflect on myself as a writer. I brought back to my classroom a writing-process approach, in which students had opportunities to draft and revise, to give and respond to feedback before submitting their work for a grade. These practices significantly improved both the quality of their writing and their attitude toward it. My interest in assessment's formative classroom potential grew from that experience.

During the early and middle years of my teaching career, I studied feedback, self-assessment, self-reflection, and metacognition. Like many teachers before me and since, I experimented with devising lessons and activities using these ideas to deepen students' understanding of the content and of themselves as learners. I drew ideas from the work of Grant Wiggins, Rick Stiggins, and Vicki Spandel, all advocates of using assessment to advance, not merely measure, achievement. As I moved from the classroom into curriculum development and then to staff development, I focused my work with teachers on assessment practices that help students learn.

In 2001, my husband Steve and I joined Rick Stiggins and Judy Arter at the Assessment Training Institute in Portland, Oregon. Collectively and in various combinations, the four of us have written a series of books aimed at improving teachers' classroom assessment practice. Our primary text, *Classroom Assessment for Student Learning: Doing It Right—Using It Well* (2004, 2012), is grounded in the concept of student-involved assessment. In it, we briefly describe the seven strategies of assessment for learning.

This book extends those ideas into practical applications. The seven strategies represent a synthesis of best thinking in the field about high-impact formative assessment practices. Shaped by more than 30 years of teaching, reading, experimenting, and learning from students and colleagues and refined through thousands of workshops given over the years to school faculties, the seven strategies provide a practical classroom framework for using assessment to "grow" learning.

Assessment in Support of Learning

> Innovations that include strengthening the practice of
> formative assessment produce significant and often
> substantial learning gains.
>
> *—Black & Wiliam, 1998b, p. 140*

*T*his conclusion, from Paul Black and Dylan Wiliam's extensive review of research on formative assessment practices, is in large part responsible for the widespread focus in education on the particular kind of assessment known as *formative*. Black and Wiliam's research review (1998a) examined studies that collectively encompassed kindergartners to college students; represented a range of subject areas, including reading, writing, social studies, mathematics, and science; and were conducted in the United States and other countries throughout the world. The gains reported in the studies they described are among the largest found for any educational intervention. Not surprisingly, a steady stream of commercial formative assessment programs and products has surfaced over the last decade, in response to the achievement gains and gap-closing powers reported by Black and Wiliam and other more recent researchers. The adjective *formative* now appears frequently in titles of commercially prepared tests and item banks, interim and benchmark tests, short-cycle assessments, and classroom assessments. In some instances, this term has become synonymous with activities designed to monitor student understanding, such as those introduced by Madeline Hunter (1982).

But, does calling a product or practice *formative* make it so? Is formative assessment an instrument or a process? Is it a test or a collection of activities involving white boards, cups, thumbs, and clickers? What is it about formative assessment that gives it power to increase learning? And most importantly, what should we be doing with formative assessment in the classroom? In this chapter, we'll look at what formative assessment is and isn't, current research

on assessment practices that support learning, and how the framework of seven strategies can be used to implement high-impact formative assessment activities daily in the classroom.

> **Chapter 1 Learning Targets**
>
> At the end of Chapter 1, you will know how to do the following:
>
> **1.** Understand the importance of using assessment practices that meet both teachers' and students' information needs
>
> **2.** Know what the Seven Strategies of Assessment for Learning are and how they connect to research on high-impact formative assessment practices
>
> **3.** Understand how formative assessment practices can help shift the classroom culture to a learning orientation

What Is Formative Assessment?

First let's look at what is and what isn't formative. For Black and Wiliam, and for many other experts in the field, formative assessment is not simply an instrument or an event, but a collection of practices with a common feature: *They all lead to some action that improves learning.* Educational researchers emphasize this point when they describe what is at the heart of formative assessment:
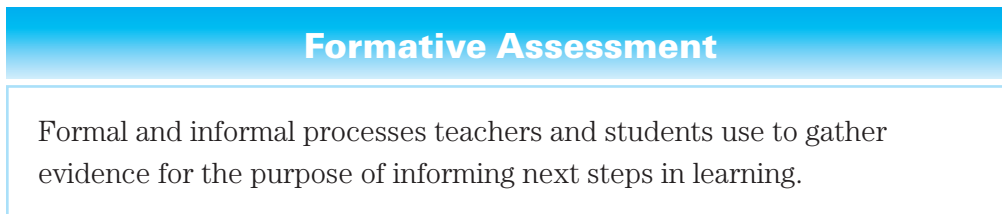
- "Formative assessment, therefore, is essentially feedback (Ramaprasad, 1983) both to the teachers and to the pupil about present understanding and skill development in order to determine the way forward" (Harlen & James, 1997, p. 369).

- "[Formative assessment] refers to assessment that is specifically intended to provide feedback on performance to improve and accelerate learning" (Sadler, 1998, p. 77).

- "Formative assessment is defined as assessment carried out during the instructional process for the purpose of improving teaching or learning. . . . What makes formative assessment formative is that it is immediately used to make adjustments so as to form new learning" (Shepard, 2008/2009, p. 281).

- Assessment is formative "to the extent that evidence about student achievement is elicited, interpreted, and used by teachers, learners, or their peers, to make decisions about the next steps in instruction that are likely to be better, or better founded, than the

decisions they would have taken in the absence of the evidence that was elicited" (Black & Wiliam, 2009, p. 6).

- "Broadly conceived, formative assessment refers to the collaborative processes engaged in by educators and students for the purpose of understanding the students' learning and conceptual organization, identification of strengths, diagnosis of weaknesses, areas for improvement, and as a source of information that teachers can use in instructional planning and students can use in deepening their understandings and improving their achievement" (Cizek, 2010, pp. 6–7).

A common thread throughout formative assessment research is that an instrument itself cannot be called "formative." It is the *use* of the information gathered (by whatever means, formal or informal) *to adjust teaching and learning as needed* that merits the "formative" label. The definition in Figure 1.1 captures succinctly what formative assessment encompasses when it leads to achievement gains.

Figure 1.1

Formative Assessment

Formal and informal processes teachers and students use to gather evidence for the purpose of informing next steps in learning.

In the classroom we assess formally through assignments, tests, quizzes, performances, projects, and surveys. These instruments must be of high quality—that is, they must yield accurate information about the achievement expectations being taught— and they must produce evidence at a fine enough "grain size" to be instructionally useful. We assess informally through questioning and dialogue, observing, and anecdotal note taking. These questions and events must also be carefully constructed to yield accurate and useful information. In recent years conflicting opinions have arisen about whether formative assessment is an instrument or a process. We are perhaps better served by understanding that a well-designed instrument, question, or activity is essential

Assessments provide evidence about learning. What we do with the evidence determines whether the event is formative or summative.

to formative assessment. Yet without an understanding of *effective use* of the assessment process and its results, nothing "formative" will happen. Given a well-designed instrument, question, or activity, we may or may not be engaged in formative assessment. The determining factor is not the type of assessment we use, but rather what we and our students are able to do with the information it yields.

Summative Assessment

A summative assessment can be thought of as any instrument or task whose results are intended to be used to make a judgment about level of competence or achievement (Figure 1.2). The results of such assessments are generally used to evaluate rather than shape learning, so a summative assessment is generally not formative. For example, at the program level, an assessment is summative when results are used to make judgments such as determining how many students are and are not meeting standards in a certain subject for purposes of accountability. The data may be reported to educators within the system, the school board, and the community in broad categories for this purpose.

Figure 1.2

Summative Assessment
Assessments that provide evidence of student achievement for the purpose of making a judgment about student competence or program effectiveness.

At the classroom level, an assessment is summative when it is given to determine how much students have learned at a particular point in time, for the purpose of communicating achievement status to others. The communication usually takes the form of a symbol, a letter grade or number, or a comparison to a standard such as "Meets the Standard" or "Proficient" that is reported to students and parents.

Formative and Summative Use of the Same Assessment

A misconception arises when we think an assessment can never serve both purposes. Sometimes an assessment intended to be used formatively can be used

summatively, such as when the evidence indicates that students have attained mastery and no further instruction is needed. Sometimes an assessment intended to be used summatively can and should be used formatively, such as when a test reveals significant problems with learning that we can address through examining the results and designing appropriate next steps. Often with performance assessment, the same task is first used formatively and then summatively. For example, with a writing task, the student creates a draft, revises it, submits it to the teacher or a peer writing group for feedback, and revises again before submitting the final piece to the teacher for a grade.

Researcher Randy Bennett (2011) offered a strong case for attending to the learning support offered by carefully crafted summative assessments:

- Preparing for the test can lead to deeper learning by helping students consolidate and organize knowledge, rehearse processes and strategies, make stronger links to ways the knowledge can be used, and develop automaticity of application.

- Taking a test can contribute to long-term retention of the content.

- The results of the test can be used to identify students needing further instruction either immediately or in the next teaching cycle.

In a nutshell, think carefully about the intended uses of assessment information prior to selecting or designing the instrument. If you intend to use it both formatively and summatively, make sure the instrument is designed to support both uses.

> **Formative Use of Summative Data**
>
> Don't overlook appropriate formative uses of summative information.

Requirements for Maximizing Impact of Formative Assessment

Whether the original intent of the assessment instrument or event is formative or summative, achievement gains noted in research studies will not materialize unless certain conditions are met. At least some of these conditions are often *not* met by assessments whose primary purpose is summative; sadly, they are often not met even by assessments intended to be formative. The conditions are as follows:

- Aligned to instruction. The assessment instrument or event is designed so that it aligns directly with the content standards

to be learned. All items or tasks match what has been or will be taught.

- Diagnostic for teachers. The instrument or event provides accurate information of sufficient detail to pinpoint specific problems, such as misunderstandings, so that teachers can make good decisions about what actions to take and with whom.

- Diagnostic for students. If the instrument or event is intended for student decision making, the information provided gives specific guidance on what parts of the learning targets have been mastered and what parts are in need of further action.

- Timing of results. The results are available in time to take action with the students who generated them.

- Time for action. Teachers and students have time to and do indeed take action based on the results.

If one or more of these conditions is not fulfilled, we have lost an opportunity to improve achievement. For example, the first four conditions may be in place, but if a pacing guide's schedule precludes further learning opportunities even when formative assessment results clearly indicate more learning is needed, there might just as well have been no formative assessment at all. Another wasted opportunity occurs if the first four conditions are in place but the assessment is simply graded, as is sometimes the case with common formative assessments. Assessment does not accomplish a formative purpose when "the information is simply recorded, passed on to a third party who lacks either the knowledge or the power to change the outcome, or is too deeply coded (for example, as a summary grade given by the teacher) to lead to appropriate action" (Sadler, 1989, p. 121). No action—no gains.

It is a good idea to review the assessments considered formative in your context against the requirements for effective formative use. You may also want to refer to the table in Figure 1.3, which lists types of assessments present in many current school systems, identifies their primary purposes, and classifies their intended uses.

High-Impact Formative Assessment Practices

The collection of studies Black & Wiliam (1998a, 1998b) examined represents a diverse array of interventions, all of which featured some formative use

Figure 1.3

Formative or Summative?

Type of Assessment	What Is the Purpose?	Who Will Use the Information?	How Will It Be Used?	Is the Use Formative or Summative?
State/ provincial test	Measure level of achievement on state/ provincial content standards	State or Province	Determine achievement level of each student	Summative
		District, Teacher Teams	Determine program* effectiveness	Summative
	Identify percentage of students meeting performance standards on state/provincial content standards	State or Province	Comparison of schools/ districts	Summative
		District, Teacher Teams	Develop programs/ interventions for groups or individuals	Formative
District benchmark, interim, or common assessment	Measure level of achievement toward state/provincial content standards	District, Teacher Teams	Determine program* effectiveness	Summative
		District, Teacher Teams	Identify program* needs	Formative
	Identify students/ portions of the curriculum needing additional instruction	District, Teacher Teams, Teachers	Plan interventions for groups or individuals	Formative
Classroom assessment	Measure level of achievement on learning targets taught	Teachers	Determine grade for reporting purposes	Summative
	Diagnose student strengths and areas needing further work	Teacher Teams, Teachers	Revise teaching plans for next year/semester	Formative
			Plan further instruction/ differentiate instruction for these students	Formative
		Teachers, Students	Provide feedback to students	Formative
	Understand strengths and areas needing further work	Students	Self-assess, set goals for further study/work	Formative

* Program = curriculum, texts/resources, and pedagogy

Identifying program needs:

- Are we teaching to the right content standards/learning targets?
- Do we have sufficient texts and other resources?
- Are our teaching strategies effective?

of assessment data or processes. Practices yielding large achievement gains involved the following actions:

- Use of classroom discussions, classroom tasks, and homework to determine the current state of student learning and understanding, with action taken to improve learning and correct misunderstandings

- Provision of descriptive feedback, with guidance on how to improve, during the learning

- Development of student self- and peer-assessment skills

Notice where these recommended practices fall on the chart in Figure 1.3—all in the Classroom Assessment category. Classroom assessment, designed to reflect gains in learning related to what teachers and students are doing daily, is most capable of providing the basis for understandable and accurate feedback about the learning while there is still time to act on it. This level of assessment also has the greatest capacity to develop students' ability to monitor and adjust their own learning. Formative assessment is a powerful tool in the hands of both teachers and students, and the closer it comes to everyday instruction, the stronger it is.

Formative Assessment in Teachers' Hands

In Black and Wiliam's (1998b) first category of formative assessment practices—"Use of classroom discussions, classroom tasks, and homework to determine the current state of student learning/understanding, with action taken to improve learning/correct misunderstandings"—the teacher is the one who is gathering the information, interpreting it, and acting on it. Many strong programs and practices help teachers obtain, interpret, and act on student achievement information. Data-driven decision making, developing interim assessments, Response to Intervention, differentiated instruction, minute-by-minute assessment, and questioning strategies are among the more well-known of those focusing on one or more aspects of teacher decision making. If you are already familiar with the term *formative assessment*, you probably have encountered its use in these contexts. They are generally designed to help teachers answer questions critical to good instruction:

- Who is and is not understanding the lesson?

- What adjustments should I make to instruction?

- What are each student's strengths and needs?

- What misconceptions do I need to address?

- How should I group students?

- What differentiation do I need to prepare?

- Are students ready for feedback? If so, what feedback should I give?

> **"Formative" Isn't Always Fast**
>
> Formative assessment is more than a menu of quick-check activities.

Formative Assessment in Students' Hands

There is no doubt that, acting on good information gathered during the course of instruction, teachers can increase what and how well students learn. Significant achievement gains attributable to formative assessment are due to enhanced questioning and dialogue techniques (Black, 2013, p. 168). It would be hard to dispute the value of noticing problems in learning and taking time to address them. However, if teacher use of assessment information is our total picture of formative assessment, one very important player is sitting on the sidelines, and it's not the principal or the superintendent. We have benched the student. Happily, more recent definitions of formative assessment demonstrate awareness of the importance of the student as a central decision maker.

> "Whatever the procedures by which the assessment message is generated, it would be a mistake to regard the student as the passive recipient of a call to action."
>
> —*Black & Wiliam, 1998a, p. 21*

In Black and Wiliam's (1998b) second category of high-impact practices— "Provision of descriptive feedback, with guidance on how to improve, during the learning"—the teacher is gathering the information and interpreting it, but the student must also interpret either the information or the teacher's reframing of it, and then the student must act on it. It is not the provision of feedback that increases learning, but rather the student's actions in response to feedback. Again here, no action, no gains.

In the third category of high-impact formative assessment practices— "Development of student self- and peer-assessment skills"—it is the student who is doing the work of gathering the information, interpreting it, and acting on it. In an often-cited article describing how formative assessment improves achievement, Australian researcher Royce Sadler (1989) concluded that the greatest potential for formative assessment derives from developing

Figure 1.4

Sadler's Indispensable Conditions for Improvement

1. The student develops a vision of quality in accordance with that of the teacher.
2. The student is able to monitor, i.e., self-assess, his or her progress during the learning.
3. The student is able to draw from a repertoire of strategies to improve whenever needed.

students' capacity to monitor the quality of their own work during production (Figure 1.4):

> The indispensable conditions for improvement are that the *student* comes to hold a concept of quality roughly similar to that held by the teacher, is able to monitor continuously the quality of what is being produced *during the act of production itself*, and has a repertoire of alternative moves or strategies from which to draw at any given point (p. 121, emphasis in original).

The ultimate goal of formative assessment then is that both the teacher and the student know what actions to take to keep learning on a successful track.

Seven Strategies of Assessment for Learning

Sadler's conditions are at the heart of what is known as "assessment *for* learning"—formative assessment practices designed to meet teachers' *and students'* information needs to maximize both motivation and achievement, by involving students from the start in their own learning (Stiggins, Arter, Chappuis, & Chappuis, 2004). These practices are fleshed out in a framework of seven strategies that apply high-impact formative assessment actions across disciplines and content standards. The Seven Strategies of Assessment for Learning offer direction as to how to meet Sadler's three conditions, phrased as questions from the student's point of view (Figure 1.5):

- Where am I going?
- Where am I now?
- How can I close the gap?

As you read through the description of each strategy, you will notice that many are familiar. They reflect practices that have always been a part of good

Figure 1.5

Seven Strategies of Assessment for Learning

Where Am I Going?
Strategy 1: Provide students with a clear and understandable vision of the learning target.
Strategy 2: Use examples and models of strong and weak work.
Where Am I Now?
Strategy 3: Offer regular descriptive feedback during the learning.
Strategy 4: Teach students to self-assess and set goals for next steps.
How Can I Close the Gap?
Strategy 5: Use evidence of student learning needs to determine next steps in teaching.
Strategy 6: Design focused instruction, followed by practice with feedback.
Strategy 7: Provide students opportunites to track, reflect on, and share their learning progress.

teaching. What may be new is their strategic use, focusing on ways both we and our students can use assessment intentionally in support of learning.

Where Am I Going?

Strategy 1: Provide a Clear and Understandable Vision of the Learning Target

Begin by giving students a vision of the learning destination. Share with your students the learning targets, objectives, or goals either at the outset of instruction or before they begin an independent practice activity. There are three ways to do this: (1) state the learning target as is, (2) convert the learning target into student-friendly language, or (3) for learning targets assessed with a rubric, convert the rubric to student-friendly language. Introduce the language of quality to students. Check to make sure students understand what learning target is at the heart of the lesson by asking, "Why are we doing this activity? What are we learning?"

Strategy 2: Use Examples and Models of Strong and Weak Work

Help students sort through what is and isn't quality work by using strong and weak models from anonymous student work, examples from life beyond school, and your own work. Begin with examples that demonstrate strengths and weaknesses related to problems students commonly experience, especially the problems that most concern you. Ask students to analyze these samples

for quality and then to justify their judgments. Use only anonymous work. When you engage students in analyzing examples or models, they develop a vision of what the knowledge, understanding, skill, product, or performance looks like when it's executed well.

Model creating a product or performance yourself. Show students the true beginnings, the problems you encounter, and how you think through decisions along the way. Don't hide the development and revision part, or students will think they are doing it wrong when it is messy at the beginning, and they won't know how to work through the rough patches.

Where Am I Now?

Strategy 3: Offer Regular Descriptive Feedback During the Learning

Effective feedback can be defined as information provided to students that results in an improvement in learning. In our current system, most of the work students do is graded, and marks or grades may be the only formal feedback they receive. Unfortunately, marks and grades deliver a coded summary evaluation without specific information about what students did well or what their next steps in learning might be.

Effective feedback identifies student strengths and weaknesses with respect to the specific learning target(s) they are trying to achieve in a given assignment. It helps students answer the question, "Where am I now?" with respect to "Where do I need to be?" And it points the way to "How can I close the gap?" With those answers in mind, offer feedback instead of grades on work that is for practice and offer students opportunities to act on it before holding them accountable for mastery. Giving students time to act allows them to grow with guidance. Also, providing this kind of feedback models the kind of thinking you want students to engage in when they self-assess and identify next steps.

Involve students as peer feedback-givers. Research literature includes promising learning gains attributable to peer feedback (c.f., White & Frederiksen, 1998). To offer each other useful feedback, students must understand the intended learning targets, objectives, or goals (Strategy 1); be clear about how to distinguish levels of quality (Strategy 2); and have practiced with protocols for offering feedback in a controlled situation (Strategy 3).

Strategy 4: Teach Students to Self-Assess and Set Goals for Next Steps

With this strategy, we transfer the ownership of learning to the student. In essence, when we teach students to self-assess and set goals, we teach them

to provide their own feedback. To be accurate self-assessors, students need a clear vision of the intended learning (Strategy 1), practice with identifying strengths and weaknesses in a variety of examples (Strategy 2), and exposure to feedback that models "self-assessment" thinking: "What have I done well? Where do I need to continue working?" (Strategy 3).

This strategy is a proven contributor to increased learning and a necessary part of becoming a self-regulated learner. It is *not* what we do if we have the time or if we have the "right" students—those who can already do it. Monitoring and regulating their own learning can be taught to all kinds of students, including those with mild to moderate learning disabilities (Andrade, 2010). Struggling students *especially* are the right students, and they have the most to gain from learning how to do this kind of thinking.

How Can I Close the Gap?

Strategy 5: Use Evidence of Student Learning Needs to Determine Next Steps in Teaching

With this strategy, we build a feedback loop into the teaching cycle, checking for understanding and continuing instruction guided by information about what students have and have not yet mastered. After having delivered a lesson and after students have done something in response, we use what they have done to determine further learning needs. Do their responses reveal incomplete understanding, flawed reasoning, or misconceptions? Are they ready to receive feedback? Strategy 5 includes a repertoire of approaches to diagnose the type of student learning needs in preparation for addressing them.

Strategy 6: Design Focused Instruction, Followed by Practice with Feedback

This strategy scaffolds learning by narrowing the focus of a lesson to address specific misconceptions or problems identified in Strategy 5. If you are working on a learning target having more than one aspect of quality, build competence one block at a time by addressing one component at a time. For example, mathematics problem solving requires choosing the right strategy as one component. A science experiment lab report requires a statement of the hypothesis as one component. Writing requires an introduction as one component. Identify the components of quality and then teach them one part at a time, making sure students understand that all of the parts ultimately will come together.

After delivering instruction targeted to an area of need, let students practice and get better before reassessing and grading. Give them opportunities

to revise their work, product, or performance, based on feedback focused just on that area of need prior to the graded event. This narrows the volume of feedback students, especially struggling learners, need to attend to at a given time and raises their chances of success in doing so. It is a time saver for you and more instructionally powerful for students.
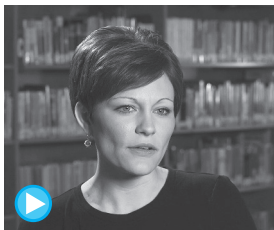
Strategy 7: Provide Opportunities for Students to Track, Reflect on, and Share Their Learning Progress

Any activity that requires students to reflect on what they are learning and to share their progress reinforces the learning and helps them develop insights into themselves as learners. These kinds of activities give students the opportunity to notice their own strengths, to see how far they have come, and to feel in control of the conditions of their success. By reflecting on their learning, they deepen their understanding and will remember it longer. By sharing their progress, students develop a deeper commitment to making progress.

These Strategies as a Progression

The seven strategies are not a recipe to be followed step by step, although they do build on one another. Strategy 4 and Strategy 7 are "destinations," Strategies 1 through 3 are "enablers," and Strategies 5 and 6 are "floaters." The destination strategies are where we want students to arrive as a result of being learners in our classrooms. These essential college and career readiness skills can be developed as early as prekindergarten. The enabler strategies, especially Strategies 1 and 2, are generally undervalued, and yet without them—without a clear picture of where we are going—it is hard to determine where we are now and even harder to identify actions to close the gap. Imagine attempting to get from Point A to Point B using a GPS system that only gives your current location, which is akin to what grades do. Strategies 1 and 2 equip the GPS system with information it needs to communicate next steps. The floater strategies 5 and 6 can happen any time and often employ the use of the preceding strategies as part of the lessons. Taken together, these formative assessment strategies represent actions that will strengthen students' sense of self-efficacy (their belief that effort will lead to improvement), their motivation to try, and ultimately, their achievement.

Video 1.1: Impact of the Seven Strategies in Elementary Classrooms

Video 1.2: Impact of the Seven Strategies in Secondary Classrooms

Watch Videos 1.1 and 1.2 to hear teachers and students discuss how the Seven Strategies of Assessment for Learning have changed their teaching and learning.

Goal Orientations, Effects on Student Motivation, and Connections to the Seven Strategies

It would be so much easier to teach if all students decided to put forth the effort needed to succeed. Many studies (Ames, 1992; Black & Wiliam, 1998a; Butler, 1988; Halvorson, 2012a; Hattie & Timperley, 2007; Schunk, 1996) have found that students' willingness to persist at a task is influenced by their *goal orientation*. This is a term researchers use to define different ideas students have about why they are doing their work in school. A goal orientation can be thought of as how a student answers the question, "What is the aim of my work?" or "Why am I doing this assignment?"

To illustrate the concept of goal orientation, let's say you ask a student what she learned today in school. It's possible she'll draw a blank. She may tell you what she did—"We worked on a math problem about camping," or "We watched our teacher cook stuff in Science and then we got to eat it"—but she may not be able to tell you why. This student's attention is focused not on what she is supposed to be *learning* from the activity but on what she is supposed to be *doing*. She may not even know the goal in math class is to learn to use the problem-solving strategy "draw a picture" to solve a problem or that the intended learning behind the teacher's cooking was for students to draw inferences about the differences between a physical change and a chemical change.

Goal orientations typically fall into one of three categories (Figure 1.6) (Ames, 1992; Black & Wiliam, 1998a; Halvorson, 2012a):

1. A learning orientation, where the student's goal is to get better

2. A performance or ego orientation, where the student's goal is to prove ability or hide a perceived lack of ability

3. A task-completion orientation, where the student's goal is to get it done and get a grade

Figure 1.6

Three Common Goal Focuses

What is the aim of my work?
1. Learning Orientation: "To get better"
2. Performance/Ego Orientation: "To prove ability" or "To hide perceived lack of ability"
3. Task Completion Orientation: "To get it done and get a grade"

Learning Orientation

Students with a *learning goal* approach focus their effort on improving their work and getting better. Their goal is to find out what they don't know and master it. Students with this orientation believe that success means improving their level of competence and that their job in school is to develop new skills and master the intended learning. Their goals focus on continuous improvement; they are motivated by a desire to become competent and by evidence of increasing mastery. They tend to seek help more frequently in developing competence and explain help avoidance in terms of attempting independent mastery.

A learning goal orientation results in the following beliefs and behaviors (Ames, 1992, p. 262; Halvorson, 2012a, pp. 43–52):

- Belief about effort: Effort will lead to success ("I can do this if I keep trying")

- Direction of effort: Developing new skills, trying to understand their own work, improving their level of competence, and achieving a sense of mastery relative to their own past level

- Response when faced with difficulty: Increased level of involvement and commitment to effort-based strategies

- Motivation to learn and a willingness to engage in the process of learning

- "Failure tolerance": Belief that failure can be overcome by a change in strategy

- Development of an intrinsic valuing of learning

"What does 'done well' look like?" is the guiding question of students with a learning orientation.

Performance and Ego-Involved Orientations

Students with a *performance goal* or an *ego-involved goal* approach to school focus their effort on protecting their sense of self-worth. Their goal is to attain public recognition of having done better than others or having performed at a superior level. Students with this orientation often believe successful achievement is a function of ability, not a result of effort. Their sense of self-worth is tied to their capacity to demonstrate high ability by doing better than others

or achieving success with little effort. Their goals focus on being judged as smart or being seen as competent in relation to others. They are motivated by judgments indicating superior performance. Students with *ego-involving goals* are working with a focus primarily on maintaining positive self-esteem by demonstrating that they have high ability or masking their perceived low ability. They tend to avoid seeking help and in research studies have explained this behavior in terms of hiding their lack of ability.

A performance goal or ego-involved goal orientation results in the following beliefs and behaviors (Ames, 1992, pp. 262–263; Halvorson, 2012a, pp. 43–52):

- Belief about effort: Trying hard when it doesn't lead to success proves lack of ability

- Direction of effort: To exceed the performance of others or hide perceived lack of ability

- Response when faced with difficulty: Anxiety and poor performance ("I don't know what I'm doing, so I lack ability"); quits, cheats, or chooses easier work

- Highest value is achieving success with little effort, which leads to unwillingness to try effort-based strategies

- Help avoidance to hide perceived lack of ability

"How do I get an A?" or "How do I avoid being seen as stupid?" are the guiding questions of students with a performance or ego-involved orientation.

Task-Completion Orientation

Students with a *task-completion* approach to school focus their effort on assignment completion. They believe it is their job to finish the task—to get it done—and to get the points. Students with this orientation believe that points and grades, rather than learning and mastery, are the aim of their work.

A task-completion orientation results in the following beliefs and behaviors (Schunk, 1996; Black & Wiliam, 1998a):

- Belief about effort: Will expend as much as needed to get work turned in or earn points

- Direction of effort: Activity completion rather than producing quality

- Response when faced with difficulty: Works for points rather than understanding; looks for ways to get points

- Attitude that it matters less who does the work as long as it's turned in

"When is it due?" or "How much is this worth?" are the guiding questions of students with a task-completion orientation.

How the Seven Strategies of Assessment for Learning Contribute to a Learning Culture in the Classroom

Goal orientations are a response to a set of conditions: students can hold one set in one classroom and another in a different one. Our assessment practices do a great deal to shape students' goal orientations. The following quotes are from a group of eighth-graders in a science class where the teacher uses the Seven Strategies of Assessment for Learning as a regular part of instruction (Westerville City School District).

- Jordan: "I like Mr. Holman's class because he's more based on that you get the concept of his class instead of just trying, like, to give you a grade. He wants to make sure you understand the material he's teaching you."

- Emmanuel: "I like it. You feel good when you get the quiz because you know, no pressure, you're just going to find out what you need help in. I actually look forward to taking quizzes in his class because I myself don't normally ask that much questions, so when I take the quiz . . . it points out what you're doing wrong. So I love taking quizzes in his class. That's a first."

- Patricia: "He teaches us that it's fine not to get it right the first time as long as when we do it again it's better than last time."

- Bintu: "Instead of my trying to get done just because of the points, I truly take my time on it and complete it and make sure I learn something. The other classes, the work that's worth points, I just rush through, just to get my points in, but in his class I take my time, do the work, and learn from it."

Contrast these students' beliefs with ninth-grader Claire, who came home from the first week of school and stated: "I'm doomed in English this year. All of my mistakes count against me." Although Mr. Holman did not teach his students about goal orientations, their comments clearly demonstrate a learning orientation to the work they do in response to how he has

structured the learning environment and how that has affected their sense of competence as learners.

Watch Video 1.3 to hear a teacher and students discussing a classroom learning environment that focuses on learning.

Video 1.3: Developing a Learning Culture in the Classroom

Formative Assessment Practices and Grading Issues

Based on my own teaching experiences, reading research, and working with teachers and students in classrooms over the past 30 years, I believe the key to creating a level playing field for all students is in establishing a different relationship between assessment and learning. The research on the impact of goal orientations on student motivation shows us that students are prevented from learning by assessment practices embedded in our traditional grading practices.

To consider this issue from another perspective, think of basketball. Basketball generally is a "cut" sport: Players try out and not everybody makes the team. We don't usually think of our classrooms as places where learning is a cut sport. No teacher wakes up in the morning and says, "Today I need to exclude a few students." Yet some of our traditional assessment practices structure the rules of success so that education becomes a "sport" many students feel "cut" from and choose to drop.

How does assessment do this? Three typical classroom causes are (1) not allowing students sufficient time to practice, (2) grading for compliance rather than learning, and (3) using assessment practices that distort achievement.

Not Allowing Sufficient Time for Practice

Let's assume that the reason teachers have jobs is because students don't already know what we are teaching. It follows that we can expect a need for instruction accompanied by practice, which will not be perfect at the start. We can expect that we'll need to monitor the practice to intervene with correctives so students don't spend time learning it wrong. If practice time is cut short by a pacing guide or other directive about what to "cover," only those students who need a minimum of practice to improve will succeed. The others will tend to conclude they aren't very good at the task or subject. But that is our premise: They *aren't* good at it. Our job is to give them sufficient opportunity to improve through instruction, practice, and feedback. If we cut learning short by assessing for the grade too soon, we have, in effect, decided to exclude those students.

Grading for Compliance Rather Than Learning

Awarding points for work completion tends to cause students to believe the aim of their effort in school is to get work done and to get points. When completion rather than learning is the trigger for earning points, it matters less who does the work or whether learning has occurred. The intent is to get students to do the practice, but the effect is to send the wrong message about the purpose of practice—to improve learning. When *done* is the goal rather than *improved learning*, growth is often marginal. In addition, when we don't look at the work, we can't use it as evidence to guide further instruction. We close our eyes to information about learning needs and shut more students out of the game.

Distorting Achievement

Including scores on practice work in the final grade is a common grading procedure that distorts achievement. When students need practice to learn, their beginning efforts are not generally as strong as their later performance. Averaging earlier attempts with later evidence showing increased mastery doesn't accurately represent students' true level of learning, and some give up trying altogether when they realize that they can't overcome the blow to their grade inflicted by early imperfect trials. This also reinforces the damaging inferences that being good means not having to try and that if you have to try, you aren't good at the subject. If one of our goals is to get students to try, then trying shouldn't result in the punishment of a low grade assigned too soon.

A less common but equally damaging procedure used when students don't do well as a group on a test is to "curve" the grades by reapplying the grade point cutoffs at lower levels, so for example, what was a "C" becomes an "A." This distortion of achievement masks the cause of low performance. Were the results inaccurate because of flaws in certain items? Were items too difficult for the level of instruction preceding the test? Were there items on the test representing learning that wasn't part of instruction? Each of these problems has a different solution, and each of them leads to misjudgments about students' levels of achievement. Perhaps the most harmful are those judgments students make about themselves as learners. Or did the results accurately represent learning not yet mastered? When we engage in practices that misrepresent achievement, we cut more than a few students out of learning.

Changes to Consider

All of these customs can be justified, but if learning suffers, we have created a more serious problem than the one we intended to solve. These practices lead

us to ignore students' learning needs, and they discourage students from seeing themselves as learners. What is the antidote? Here are some key places to start:

- Emphasize that learning is the goal of education, and focus instruction and activities on clear learning targets.

- Ensure that your classroom assessment practices treat learning as a progression and mistakes as a way to learn.

- Offer penalty-free feedback during the learning that helps students improve.

- Use assessment as a means to know your students and to guide your own actions.

- Use assessment practices that help students see and know themselves as learners.

Adopting formative assessment practices does not mean grades aren't important. Grades are important. Grades do matter. They simply don't work well to guide learning. Grades are an accountability device that should be applied after (hopefully) sufficient opportunity to get better. The question in a learning culture is not "How can I improve my grade?" but "What do I need to do to master this?" In such a classroom culture, learning happens first and grades follow.

We can create a learning culture in our classrooms by emphasizing that learning is the aim of our work together. Formative assessment is essentially assessment focused not on judging but on helping students to learn. When we share the learning targets up front with students and use some of our precious instructional time helping them understand where they are headed (Strategies 1 and 2), we take the first steps toward establishing a focus on learning. When we offer feedback focused on the learning targets on work that is for practice, rather than giving grades or points (Strategy 3), we allow students a penalty-free opportunity to improve their learning. When we use assignments and quizzes as opportunities for students to find out what they haven't yet mastered coupled with reteaching opportunities (Strategies 4 and 6), we emphasize that learning is the goal. When we take a closer look at the work they are doing to understand what their learning needs are (Strategy 5), we communicate that their learning matters to us. When we teach students how to revise their work and deepen their learning (Strategy 6), we give them opportunities to improve as learners before the graded event. When we give students opportunities to track their progress, to notice how far they have come, and to share their achievement in those terms, we help them connect success to effort (Strategy 7).
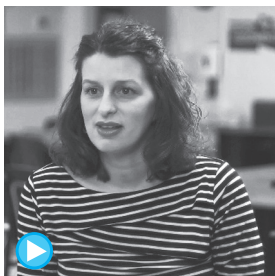
Video 1.4: Formative Assessment Practices and Grading Issues

The relationship between motivation to learn and assessment does not run through accountability. It runs through formative practices that show students *who they are as learners*—practices that offer students a hopeful, forward-looking stance to the road ahead. If learning is truly the intended goal of the education game, all students can play successfully.

Watch Video 1.4 to hear teachers and students talk about how changes in grading practices have influenced learning.

Conclusion

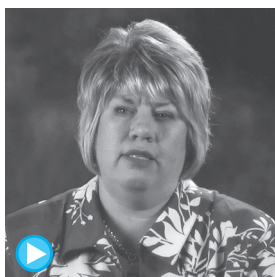**Video 1.5:** Implementation Advice: Elementary Teachers

The Seven Strategies of Assessment for Learning represent a progression of teaching activities that link *assessment* and *learning*. They call for a use of assessment information that differs from the traditional practice of associating *assessment* with *test* and *test* with *grade*. These assessment practices will not result in more grades in the gradebook. Rather, they ask us to think more broadly about what assessment is and what it is capable of accomplishing.
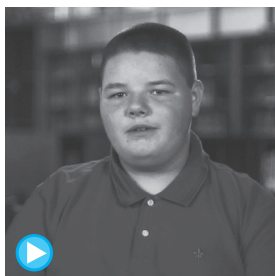
Video 1.6: Implementation Advice: Secondary Teachers

These activities won't eliminate all learning problems in your classroom. Too many factors are at work to be completely overcome by one set of strategies. However, they will take you farther in a more positive direction by helping you reclaim assessment as an integral part of teaching and learning. The seven strategies offer a sequence of effective research-based practices that develop in students the patterns of thought they need to substantially improve their own achievement. In doing so, they will introduce your students to the motivational power of being in control of the conditions of their success. Assessment can be your friend. It can be your students' friend, too—and it can even be fun.

Watch Videos 1.5, 1.6, and 1.7 for suggestions from teachers and administrators about getting started with formative assessment practices.

Video 1.7: Implementation Advice: Administrators

The Chapters Ahead

The following chapters will explain the strategies in detail, provide a research-based rationale for their use, describe how they work, and offer hands-on classroom activities that you can use tomorrow. Each chapter includes instructions for carrying out core procedures and suggestions for adaptations, all selected to make the intent and the execution of the strategy as clear as

possible. Examples come from prekindergarten to college levels in a range of content areas. The majority can be adapted to work well in most contexts. Even if an example is not from your grade level or subject, you may find it useful. Information about key research recommendations will help you modify the ideas to fit your context without diluting their potential for positive impact.

Further Reading

The following resources elaborate on topics presented in this chapter.

Ames, C. (1992). Classrooms: Goals, structures, and student motivation. *Journal of Educational Psychology*, *84*(3), 261–271.

This article examines the impact of different goal orientations on student achievement and makes recommendations about which classroom structures best support development of a mastery (learning) orientation.

Chappuis, J., Stiggins, R., Chappuis, S., & Arter, J. (2012). *Classroom assessment for student learning: Doing it right—using it well* (2nd ed.). Upper Saddle River, NJ: Pearson Education.

This textbook teaches what classroom teachers need to know and be able to do with all aspects of classroom assessment. Chapter 1 defines assessment literacy and gives an overview of the knowledge and skills educators need to ensure they are using high-quality classroom assessment practices in their classrooms. Chapter 2 explains formative and summative uses of assessment information. The rest of the chapters go into depth on assessment design and use, including grading issues.

Halvorson, H. G. (2012). *Succeed: How we can reach our goals*. New York, NY: Penguin.

This book combines research in psychology with anecdotes and practical examples to explain the types of thinking that lead to commitment to effort-based strategies and success at achieving difficult goals.

Hattie, J. (2009). *Visible learning: A synthesis of over 800 meta-analyses relating to achievement*. New York, NY: Routledge.

In this book, Hattie pulls together results from meta-analyses of studies relating to all facets of student achievement and identifies those with the most power to influence learning.

Hattie, J. (2012). *Visible learning for teachers: Maximizing impact on learning*. New York, NY: Routledge.

In this follow-up to his 2009 book *Visible Learning*, John Hattie summarizes the most successful practices that impact achievement and offers recommendations for implementation in the classroom.

Shepard, L. A. (2008/2009). The role of assessment in a learning culture. *Journal of Education, 189*(1/2), 95–106.

This article addresses the issue of how assessment came to be viewed as separate from teaching and why it is so important to consider assessment practices as a part of effective pedagogy in every classroom.

Understanding and Applying the Content of Chapter 1

End-of-chapter activities are intended to help you master the chapter's learning targets and apply concepts to your classroom. They are designed to deepen your understanding of the chapter content, provide discussion topics for collaborative learning, and guide implementation of the content and practices taught in the chapter. Forms and materials for completing each activity appear in editable Microsoft Word format in the Chapter 1 DVD file. Each form needed for an activity is listed after the activity directions and marked with this symbol:

Chapter 1 Learning Targets

1. Understand the importance of using assessment practices that meet both teachers' and students' information needs
2. Know what the Seven Strategies of Assessment for Learning are and how they connect to research on high-impact formative assessment practices
3. Understand how formative assessment practices can help shift the classroom culture to a learning orientation

Chapter 1 Activities

Discussion Questions (All learning targets)

Activity 1.1   Keeping a Reflective Journal (All learning targets)

Activity 1.2   Defining Formative Assessment (Learning target 1)

Activity 1.3   Balancing Formative and Summative Uses (Learning target 1)

Activity 1.4   Maximizing Impact of Formative Assessment (Learning targets 1 and 2)

Activity 1.5   Meeting Teachers' and Students' Information Needs (Learning targets 1 and 2)

Activity 1.6   Inventorying Formative Practices (Learning targets 1 and 2)

Activity 1.7   Thinking More About Student Goal Orientations (Learning target 3)

Activity 1.8   Surveying Students (Learning targets 1 and 3)

Activity 1.9   Collecting Samples of Student Work (Learning target 1)

Activity 1.10 Reflecting on Your Own Learning (All learning targets)

Activity 1.11 Setting Up a Growth Portfolio (All learning targets)

Chapter 1 Discussion Questions

Discussion questions are also explored in depth in the activities listed in parentheses.

Questions to Discuss Before Reading Chapter 1

1. What is *formative assessment*? (Activity 1.2)
2. What do you currently do with assessment information? (Activity 1.4)
3. What do your students do with assessment information? (Activity 1.4)

Questions to Discuss After Reading Chapter 1

4. Which of the seven strategies are you most interested in doing more with? (Activity 1.6)
5. How does your use of assessment practices influence your students' goal orientations? (Activity 1.7)
6. Which ideas from this chapter were most significant to you? (Activity 1.10)
7. What one action might you take based on your reading and discussion of Chapter 1? (Activity 1.10)

Activity 1.1

Keeping a Reflective Journal

This is intended as an independent activity. If you choose to do it, you may want to discuss the thoughts you record with your learning team.

1. Keep a record of your thoughts, questions, and any implementation activities you tried while reading Chapter 1.

◎ Activity 1.1 Chapter 1 Reflective Journal Form

Activity 1.2

Defining Formative Assessment

This is intended as an independent activity. If you choose to do it, you may want to discuss the results with your learning team.

1. Before reading Chapter 1, write your own definition of the term *formative assessment.* When you finish the chapter, revisit your definition. Make changes if needed, based on the chapter information. Identify what changes you made and why you made them.

◎ Activity 1.2 Defining Formative Assessment

Activity 1.3

Balancing Formative and Summative Uses

This is intended as a team activity.

1. After reading the section titled "What Is Formative Assessment?" review Figure 1.3 with your learning team. Identify which assessment uses are present in your school and district.
2. Discuss: Are formative and summative uses in balance? If not, what modifications might you recommend? With whom might you share your recommendations? What rationale might you give for your recommendations?

Activity 1.3 Balancing Formative and Summative Uses

Activity 1.4

Maximizing Impact of Formative Assessment

This activity can either be completed independently or with a team.

1. After reading through the section "Requirements for Maximizing Impact of Formative Assessment," make a list of formative assessment instruments and practices you have used over the past grading period.
2. Evaluate each entry against the five conditions for maximizing impact.
3. Note any revisions you would make to ensure effective formative use.

Activity 1.4 Maximizing Impact of Formative Assessment

Activity 1.5

Meeting Teachers' and Students' Information Needs

This is intended as an independent activity, followed by a team discussion.

1. After reading the section titled "High-Impact Formative Assessment Practices," make a list of formative assessment instruments and practices you have used over the past grading period.
2. For each practice, determine who is gathering the information, who is interpreting the information, and who is acting on it.
3. Discuss your list with your learning team. Do your current practices meet both teacher and student information needs?

◉ Activity 1.5 Meeting Teachers' and Students' Information Needs

Activity 1.6

Inventorying Formative Practices

This is intended as an independent activity, followed by a team discussion.

1. After reading the section titled "Seven Strategies of Assessment *for* Learning," make a list of formative assessment instruments and practices you have used over the past grading period.
2. Categorize your list according to the seven strategies.
3. Discuss with your team where your current practices fall: Are some strategies more populated than others? Which of the seven strategies are you most interested in doing more with?

◉ Activity 1.6 Inventorying Formative Practices

Activity 1.7

Thinking More About Student Goal Orientations

This is intended as a learning team discussion activity.

After reading the section "Goal Orientations, Effects on Student Motivation, and Connections to the Seven Strategies," discuss one or more of the following questions with your learning team:

1. What else might students be focused on as the goal of school work, *other than learning*?
2. How might that other focus *inhibit success* in learning?
3. What are key factors in *developing* a learning focus in students?
4. How can *assessment practices* contribute to a learning culture and to creating college- and career-ready students?

Activity 1.8

Surveying Students

This is an independent activity. If you choose to do it, you may want to discuss the results with your learning team.

On the DVD in the Chapter 1 file you will find two sets of surveys—an elementary version and a secondary version—designed to elicit students' responses to important aspects of assessment. Each set has a presurvey and a postsurvey. The only difference between the surveys is the instructions. The surveys are anonymous; the information is intended to be examined and compared as a classroom set of data.

1. Select either the elementary or the secondary survey and print out the presurvey form. Administer it to students at the start of your study of the Seven Strategies of Assessment for Learning.
2. Print out the postsurvey. Administer it to the same students at the end of the grading period, semester, or school year.
3. Compare the results of the pre- and postsurveys. Use this information as one indicator of the impact of the practices you are using on students' attitudes about assessment and understanding of themselves as learners.

◎ Activity 1.8a Elementary Student Pre-Survey   ◎ Activity 1.8c Elementary Student Post-Survey

◎ Activity 1.8b Secondary Student Pre-Survey   ◎ Activity 1.8d Secondary Student Post-Survey

Activity 1.9

Collecting Samples of Student Work

1. To document students' changes in achievement throughout the course of your study, collect samples of their work from the beginning. If you teach a large number of students or a number of subjects, you may want to focus on a handful of students—a few typically strong learners, a few midrange learners, and a few struggling learners.

2. Collect samples of their work periodically throughout the year.

3. Look for changes that are different from what you would normally expect to see.

4. Save these samples and include them in your own personal growth portfolio (Activity 1.11). These artifacts can be a powerful testament to your learning, as increased student growth is an important goal of your work.

Activity 1.10

Reflecting on Your Own Learning

This is an independent activity. If you choose to do it, you may want to discuss the results with your learning team.

Review the Chapter 1 learning targets and select one or more that represented new learning for you or struck you as most significant from this chapter. Write a short reflection that captures your current understanding. If you are working with a partner or a team, use this as a discussion prompt.

Activity 1.10 Reflecting on Chapter 1 Learning

Activity 1.11

Setting Up a Growth Portfolio

This is an independent activity. If you choose to do it, you may want to share the artifacts you select with your learning team.

Part A: Growth Portfolio Option

In this activity, you will collect evidence of your progress throughout the course of your study and assemble the evidence in your own growth portfolio—a collection of artifacts selected to show growth over time—focused on formative assessment practices.

You may not want to include evidence of everything you have learned. You may choose to narrow your focus. Each chapter begins with a list of learning targets. If one or more of those learning targets is an area of improvement for you, you may wish to complete the corresponding chapter activity or activities and use them as portfolio entries, along with any other related artifacts you develop.

Many people find it helpful to keep a record of their thoughts and questions as they read each chapter and try out activities, both for their own learning and to prepare for learning team discussions. Therefore, the first activity in each chapter is to create a reflective journal entry that documents your thoughts, questions, and activities. This can also become part of your growth portfolio.

Part B: Portfolio Artifacts from Chapter 1

Any of the activities from this chapter can be used as portfolio entries for your own growth portfolio. Select activities you have completed or artifacts you have created that will illustrate your competence at the Chapter 1 learning targets. If you are keeping a reflective journal, you may want to include Chapter 1's entry in your portfolio. The portfolio entry cover sheet provided on the DVD will prompt you to think about how each item you select reflects your learning with respect to one or more of these learning targets.

Activity 1.11 Chapter 1 Portfolio Entry Cover Sheet